MAY 0 3 2006

OFFICIAL

CARDINAL LAW GROUP

1603 Orrington Avenue/Suite 2000 Evanston, Illinois 60201 Telephone 847 – 905 - 7111 Facsimile 847 – 905 – 7113

Date:

MAY 3, 2006

To:

EXAMINER PHUONG, DAI

U.S. PATENT AND TRADEMARK OFFICE

Fax #:

(571) 273-8300

From:

FRANK C. NICHOLAS

Phone #:

(847) 424-2521

Client/Matter No.:

GP-304028 (2760/134)

of Pages:

21

(including cover sheet)

IF YOU HAVE ANY PROBLEMS RECEIVING THIS MESSAGE, PLEASE CALL 847/805-7111, Ext. 112 AND ASK FOR JENNIFER CRUZ

THIS MESSAGE IS INTENDED ONLY FOR THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. IT MAY CONTAIN PRIVILEGED, CONFIDENTIAL, ATTORNEY WORK PRODUCT, OR TRADE SECRET INFORMATION WHICH IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AN EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS MESSAGE IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS MESSAGE IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE INDICATED TO US BY MAIL AT THE ABOVE ADDRESS. WE WILL REIMBURSE YOU FOR POSTAGE.

Signature

+18479057113 T-348 P.02 F-883

May 3 2006

Date: May 3, 2006

| | TDAN | CMITT | AF | | | Attorney Docket | No | | GP-304 | 028 (2 | 760/1 | 34) | DEA- | |
|---|--|------------------------------------|--------------------|-------------------|---|---|--------------|--|-------------------------------|--------|----------------|------------------------------|--------------|--|
| TRANSMITTAL | | | | | | Application Number | | | 10/875,348 CENTRAL F | | | | | |
| FORM | | | | | Ì | Filing Date | | | SEPTEMBER 30, 2003 | | | | | |
| (го ве изва тог ан согтезропаелсе атве втраг вилд) | | | | | | First Named Invi | ent | or | WILLIAM E. MAZZARA, JR. MAY U | | | | | |
| | | | | | | Group Art Unit | | | 2685 | | | | | |
| | | | | | | Examiner | | | PHUONG, DAI | | | | | |
| | · - | | | ENC | LOSI | JRES (check a | a// a | that apply) | | | | | | |
| <u> </u> | Amenament | | | Assignment Papers | | | | Appeal Communication to Board of Appeals and Interferences | | | | | | |
| | After Fin | al | | | Drawing Sheets | | | | | | | | | |
| | ☐ Affigavit | svoeciaration(s) | | | After Grou | Allowance Comm | nuni | ication to | Ø | Арря | al Bri | ief | | |
| | | | | | Petition Routing Stip (PTO/SB/69) and Propnetary Information | | | | | | | | | |
| | Status Letter | | | | | convert a ssional Application | | | Post Card Receipt | | | | | |
| | One-Month Petit Time Request (d | | ın of | | Chai | arige of Correspondence Address Address Address Address Adentify below). | | | | | | | | |
| | Express Apando | Abandonment Request | | | | Terminal Disclaimer | | | | | | | | |
| | Information Disci PTO-1449 | ation Disclosure Spatement, 449 | | | | Smail Entity Statement | | | | | | | | |
| | Certified Copy of Priority Document(s) | | | | | Request of Refund | | | | | | | | |
| | Response to Miss Application | sing Parts/ Inco | mp iete | × | The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account No. 07-0860 (GENERAL MOTORS CORPORATION). A duplicate copy of this sheet is enclosed. | | | | | | | | | |
| | | | | × | that ome | eby petition unde this paper is time rwise been paid t RPORATION). A | iy fi o P | ied. Please ch eposit Account | arge an | 9860 (| ciated GENE | fees which ha ERAL MOTORS | ve not | |
| | • | | | | | ALCULATION O | _ | | | | | | | |
| | | | Hone | or No | | 1 | | Small | Entity | | | Large | Entity | |
| | Claims After Amendment | | Previo | Justy | | Present Extra | | Rate | Add1 Fee | | OF | Rate | Add'i Fee | |
| Total | | Mirtus | | | | 00 | | z \$25= | _ | _ | | × \$50= | - | |
| ndep | | Міпць | | | | 0 | | x \$100= | +- | _• | | x \$200= | | |
| ast Pr | esentation of Mull | uple Dep Claum | | | + | | | +\$180= | T | | | + \$360= | | |
| | | | | 1477 | | ADDI ICANO | | total add'i fee | | \$ 0 | | total add'i fee | \$0 | |
| Firm FRANK C NICHOLAS or Registration No. 33,883 Individual name CARDINAL LAW GROUP 1603 Orregion Avenue, Suite | | | | | | | 10 | KNET, OK AGI | | | | | | |
| | - | Evansion, IL (| / | 7 | 1 | | | | | Γ | | _ | | |

I hereby centry that this correspondence is being transmitted by facsimile to (571) 273-8300 to the United States Patent and Trademark Office on this date:

FRANK C. NICHOLAS (33,989)

| | | | | | | una | T 120 PTC | # KSDLEET AZ IT 1450. | DO PARE | Are are understant or comb | 1 | OCCUPA OF REA | | ultima il daspinos il s | | CONTROL P | ALC: N |
|------------------------|--------------------------------------|---------------------------|------------|---|---|--|---|---------------------------------|---------|----------------------------|--------------|---|--------|-------------------------|--------------|-------------|------------|
| | Т | DAN | 10 | MITT | ΔI | | | Attorney Dock | et No | , | GP-30 | 4028 (| 2760/ | 134) | F | RECI | ΞΛ |
| FORM | | | | | Application Nu | اعمس | | 10/675,349 | | | CE | ENT | RAL F | AX | | | |
| | | | | | Filing Date | | | SEPT | EMBER | 30, | | MAY 0 3 | | | | | |
| | | | | | | Fast Named In | JABIN | or . | WILLI | ME. | AAZZ | | | | ARA, JR. | | |
| | क्ष व्य | ed for all d | corres | bouldevoe suc | r tudan t | bng) | | Group Art Unit | 1 | | 2685 | | | | | | |
| | | | | | | | Ī | Exammer | | | PHUC | NG, D | AI | | | | |
| | | | | | | ENC | LOSI | URES (checi | L -11: | that anniel | | | | | | | |
| _ | A==== | | | | | | | gnment Papers | | and approxy | Τ_ | Ann | eal Ca | ATI THE LEGISTRAN | 110 B | cand of | |
| 4 | Amenamem | | | ╽╙ | Appeals and interfer | | | | | | | | | | | | |
| | After Final | | | | Drawing Sheets | | | | | | | | | | | | |
| | Afficavos/declaration(5) | | | | After Allowance Communication to Group | | | Appeal Brief | | | | | | | | | |
| | ., | | | | | | Pemon Routing Stip (PTO/SB/69) and Accompanying Pathon | | | Proprietary Information | | | | | | | |
| | Status | Lener | | | | | | ionvert a Isional Applicatio |)(I | | | Pos | т Сал | t Receipt | | | |
| ב | | lonth Pet रेक्षपण्डा (| | for Extensio | n of | | Cnar | nge of Correspor | ndenc | e Adq ress | | Additional Enclosure(5) (please identify below) | | | | | |
|] | Expres | s Apano | PANIE | ent Request | | | Tem | ninal Disclariner | | | | | | | | | |
|] | PTO-1 | 449 | | re Statement | | | Sma | ili Entity Stateme | wit | | | | | | | | |
| | Certified Copy of Priomy Document(s) | | | | | | uest of Refund | | | | | | | | | | |
| Application Credit COR | | | | | | e Commissioner is hereby authorized to charge any fees which may be required, or dit any overpayment, to Deposit Account No. <u>07-0960</u> (GENERAL MOTORS RPORATION) A duplicate copy of this sheet is enclosed. | | | | | | | | | | | |
| | | | | | | hereby petition under 37 CFR § 1 138(a) for any extension of time required to ensure list this paper is timely filled. Please charge any associated fees which have not then the paid to Deposit Account No. <u>07-0960</u> (GENERAL MOTORS ORPORATION). A duplicate copy of this sheet is enclosed. | | | | | | | | | | | |
| • | | _ | | | | • | | ALCULATION | | | | | | | | - | |
| | | | | | | | | | _ | Small | Entity | | , | Lar | ge E | ntity | |
| | | ms Afler Indinent | | | Previo | Histy | | Present Extra | | Rate | Add Fee | • | OF | Rate | | Addi Fee | |
| otai | | | | Minus | | | | 0 | - | ≥ \$25 = | . | 0 | | x \$50 |)= | | |
| iep | | | ļ | Minus | | | | 0 | | × \$100= | - | D | | x \$200 | >= | | |
| n Pr | esenyab | on of Mu | zipie | Dep Clasm | | | | | J | -\$18D= | • | _= | | + \$360 | <u>>-</u> | | |
| | | | | | | | | | | total add1 fee | | \$ 0 | | total add1 fe | se . | | S O |
| m İrviğu | ai name | 1 | CAL 180 | ANK C. NIC gistration No RDINAL LA 13 Omington anston (L. 6 | HOLAS). 33,98 W GRO Avenus | 3 UP | | <u>applicant, a</u> | .110) | CNEY, OR AG | ENI | | | | | | |
| gnak | æ | _ | / | 2/1 | 1/2 | M | | | | | Date | May | 3, 20 | <u>106</u> | | | |
| | | | | | | | CER | TREATE OF F | ACS | MILE | | | | | | | |
| | | | | spondence a Tradema | | | | by facsimile to 8: | (571 |) 273-8300 ti | | | | May 9. 2 | 2008 | | |
| Guarra | b | | 7/ | MICHOLAS | 1/2 | h | | | | | Dati | e. M | nv 3 | 2006 | | | • |

RECEIVED CENTRAL FAX CENTER

MAY 0 3 2006

Certificate of Facsimile

I hereby certify that this correspondence is being transmitted by facsimile to (571) 273-8300 to the U S

Patent and Trademark Office May 3, 2006

(Date of Transmission)

FRANK C NICHOLAS (33 983)
Name of Appellant, assignee or presented representative

Signature

May 1, 2006

Dage of Signature

PATENT Case No. GP-304028 (2760/134)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

| In re pa | tent application of: |) | |
|----------|-------------------------|------------------------|----|
| | WILLIAM E. MAZZARA, JR. |) | |
| | · |) Examiner: PHUONG, D | ΑI |
| Serial N | lo.: 10/675,349 |) | |
| | |) Croup Art Unit: 2685 | |
| Filed: | SEPTEMBER 30, 2003 |) | |
| | |) Conf. No. 5776 | |
| For: | METHOD AND SYSTEM FOR |) | |
| | RESPONDING TO DIGITAL |) | |
| • | VEHICLE REQUESTS |) | |

APPEAL BRIEF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Dear Sir:

Please consider Appellant's appeal brief as follows.

May 3, 2006 Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003 Page 2 of 18

TABLE OF CONTENTS

| 1. | Real Party In | Interest | - | • | • | • | • | 3 |
|-----|----------------|----------|----------|---------|--------|--------|---|-----|
| 2. | Related Appea | als And | Interfer | rences | | • | | 4 |
| 3. | Status Of Clai | ms | - | - | • | | • | 5 |
| 4. | Status Of Ame | endmen | ts | - | - | •• | • | 6 |
| 5. | Summary Of (| Claimed | Subjec | t Matte | r. | | | 7 |
| 6. | Grounds Of R | ejection | To Be | Reviev | ved On | Appeal | • | 8 |
| 7. | Arguments | • | - | • | - | | • | 9 |
| 8. | Summary | | | | - | - | | 12 |
| 9. | Claims Appen | dix | | - | - | • | - | 13 |
| 10. | Evidence App | endix | - | - | | • | - | 18 |
| 11 | Related Proces | edinas / | Annend | îx | | | • | 1 8 |

MAY-03-06 01:38PM FROM-CLG FAX +18479057113 T-348 P.06/21 F-883

May 3, 2006

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 3 of 18

1. REAL PARTY IN INTEREST

The real party in interest is Assignee General Motors Corporation, a corporation having an office and a place of business at 300 Renaissance Center, Detroit, Michigan, 48265-3000.

MAY-03-06 01:38PM FROM-CLG FAX +18479057113 T-348 P.07/21 F-883

May 3, 2006

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 4 of 18

2. RELATED APPEALS AND INTERFERENCES

Appellant and the undersigned attorneys are not aware of any appeals or any interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Case No. GP-304028 (2760/134) Serial No.: 10/675,349

Filed: September 30, 2003 Page 5 of 18

3. STATUS OF CLAIMS

Claims 1-2, 5-10, 12-14, and 17-20 were rejected as unparentable over United States Patent 6,487,500 to Lemelson ("Lemelson") in view of United States Patent Publication 2001/0029425 to Myr ("Myr") under 35 U.S.C. §103(a).

Claims 3 and 15 stand rejected as unpatentable under 35 U.S.C. §103(a) over Lemelson in view of Myr in further view of United States Patent Publication 2005/0003812 to Gladwin ("Gladwin").

Claims 4, 11, and 16 stand rejected as unpatentable under 35 U.S.C. §103(a) over Lemelson in view of Myr in further view of United States Patent Publication 2001/0044315 to Aoki ("Aoki").

Claims 4, 11, and 16 are the claims on appeal. See, Appendix.

MAY-03-06 01:38PM FROM-CLG FAX +18479057113 T-348 P.09/21 F-883

May 3, 2006

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 6 of 18

4. STATUS OF AMENDMENTS

Applicants filed an after final response including claim amendments that was not entered.

MAY-03-06 01:39PM FROM-CLC FAX +18479057113 T-348 P 10/21 F-883

May 3, 2006 Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 7 of 18

5. SUMMARY OF CLAIMED SUBJECT MATTER

In this summary of claimed subject matter, all citations are to the specification of United States Patent Application 10/675,349. Further, all citations are illustrative only and support for the cited element may be found elsewhere in the specification. See, pages 9-12 of the specification, *inter alia*, and FIG. 2.

The invention relates to a method for responding to digital vehicle requests. The method includes receiving 225 a voice query by a telematics unit, wherein the telematics unit 120 comprises at least one analog digital converter. The voice query is converted 230 to a compressed digital signal and the compressed digital signal is transmitted 235 to a call center node 170 in communication with an information database via a wireless network 140. The signal is parsed 245 at the call center node to determine an inquiry and the information database is accessed 245 based on the inquiry. At least one response is formulated 250 in response to the inquiry and transmitted 255 in a digital format over the wireless network to the telematics unit. The response is then translated 260 to an analog format at the at least one analog digital converter. The voice query digital signal is compressed at the telematics unit, at more than two times the compression ratio of human recognizable audio data compression, and the formulated response is compressed to allow a user of the telematics unit to understand the formulated response.

MAY-03-06 01:39PM FROM-CLG FAX +18479057113 T-348 P.11/21 F-883

May 3, 2006

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 8 of 18

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 4, 11, and 16 were rejected as unpatentable under 35 U.S.C. §103(a) over Lemelson in view of Myr in further view of Aoki.

MAY-03-06 01:39PM FROM-CLG FAX +18479057113 T-348 P.12/21 F-88

May 3, 2006

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 9 of 18

7. ARGUMENTS

Claims 4, 11, and 16 were rejected as unpatentable under 35 U.S.C. §103(a) over Lemelson in view of Myr in further view Aoki

The §103(a) rejection of claims 4, 11, and 16 is traversed.

Lemelson in view of Myr in view of Aoki fails to teach or suggest, at least, that the compression algorithm compresses the voice query signal at more than two times the compression ratio of human recognizable audio data compression and the formulated response is compressed to allow a user of the telematics unit to understand the formulated response as claimed in amended claims 1, 9, and 13.

The Examiner correctly notes the failure of Lemelson or Myr, alone or in combination, to suggest any such limitation. Rather, the Examiner relies on Aoki for such a teaching. However, at most, Aoki teaches a radio communication system using variable packet length. Thus, Aoki teaches a packetization system that does not compress the data, but rather results in dividing the data so that the size of each packet is set to an appropriate size so that transmission of the packet is completed during the vehicle stay in a communication area. See, Aoki, ¶¶47-53.

Aoki teaches that when large data is downloaded from base stations to the terminal station (or vice versa), the data is divided and packetized. See, Aoki, ¶47 (below). Additionally, when the data to be transmitted is divided into packets in this way, the size of the packet should be set to an appropriate size so that transmission of the packet is completed during the vehicle stay in a communication area. Since the time of the vehicle stay in a communication area depends on the vehicle traveling speed, the Aoki system estimates the time of the terminal station antenna stay in a communication area by detecting a vehicle speed when the vehicle enters the communication area and sets the length of the packet to be the longest as far as transmission of the packet can be completed during the stay in the communication area. See, Aoki, ¶47.

Case No. GP-304028 (2760/134) Serial No.: 10/675,349

> Filed: September 30, 2003 Page 10 of 18

[0047] When large data is downloaded from base stations K to the terminal station T, the data is divided and packetized in the control station S first. For example, the data is divided and packetized into three parts for three communication areas a, b, c, and transmitted to the three base stations K of the communication areas a, b, c as shown in FIG. 1A Each of three base stations K starts to transmit the received packet when the terminal station T enters the corresponding communication area, in this way, the perminal station T receives the three packets acquentially as the vehicle passes through the communication areas a, b, c. The terminal station T extracts the packets received from the three base stations K. by demodulation. The terminal station T further converts the extracted packets to pans of data in the original form and restores the original data by combining the parts of data. The restored data may be used for an application executed on the terminal station T. On the other hand, when large data is uploaded from the terminal station T to base stations K, the terminal station T divides the data into a plurality of packets for a plurality of communication areas, and the packets are sequentially transmitted to the corresponding base stations K as the vehicle passes through the communication areas. The packets received by the base stations K are transmitted to the control station S. The control station S combines the packets and restores the original data.

Thus, Aoki teaches adjusting a packet size for transmission based on vehicle speed. In contrast, the claims require compressing the voice query signal at more than two times the compression ratio of human recognizable audio data compression.

Those of ordinary skill in the art recognize the difference between packetization of data, and compression of the data.

Additionally, Aoki teaches that the degree of packetization is based on vehicle speed, rather than the claimed ratio of human recognizable audio data compression. As noted in the specification, a signal intended for a human recipient cannot be maximally compressed due to the need for a human to understand the request as maximally compressed signals may not be comprehensible to humans. See, pg. 1, lines 15-19 of the specification (below). Furthermore, those of ordinary skill in the art would recognize that packetization and compression are entirely different concepts and processes.

[6062] Communication devices that communicate between a vehicle, an interactive application, and an advisor on a remote node presently accomplish this through a circuit switched voice connection. Upon a mer's request from a vehicle, an analog voice input is encoded into a digital signal intended for a human recipient. This signal cannot be maximally compressed due to the need for a human advisor to understand the request—maximally compressed signals may not be comprehensible to humans. The encoded digital

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 11 of 18

While compression ratios are known in the art, the prior art does not teach or suggest utilizing a first ratio (more than two times the compression ratio of human recognizable audio data compression) to transmit a voice query in one direction, and using a second ratio different from the first ratio (to allow a user of the telematics unit to understand the formulated response) to transmit a response to the voice query in the opposite direction. Providing speech recognition at a remote location is difficult, and has been previously complicated by multiple analog to digital conversions (see, page 1, lines 13-30 of the specification). Utilizing a 'high' ratio of compression (more than two times the compression ratio of human recognizable audio data compression) increases the amount of data, and preserves more of the original signal, that can be transmitted to the speech recognition engine using available bandwidth.

Furthermore, there can be no motivation to combine these three references in light of the failure of each to either denounce their teachings as less than an ideal solution, or to proclaim the desirability of compression. This is especially true given the teachings of Aoki regarding the desirability of variable packet length, rather than the desirability of including a first compression ratio for communications in one direction, and a second compression ratio for communications in the opposite direction.

Withdrawal of the rejections to claims 4, 11, and 16 is requested.

Case No. GP-304028 (2760/134) Serial No.: 10/675,349

Filed: September 30, 2003

Page 12 of 18

SUMMARY

The Examiner's rejections of claims 4, 11, and 16 have been obviated by remarks herein supporting an allowance of pending claims 4, 11, and 16 over the art of record. The Appellant respectfully submits that claims 4, 11, and 16 herein fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. In view of the foregoing, favorable consideration and passage to issue of the present application is respectfully requested. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Dated: May 3, 2006

Respectfully submitted, WILLIAM E. MAZZARA, JR.

GENERAL MOTORS CORPORATION General Motors Legal Staff Mail Code 482-C23-B21 300 Renaissance Center P.O. Box 300

Detroit, MI 58265-3000 Phone: (313) 665-4714

CARDINAL LAW GROUP

Suite 2000

1603 Orrington Avenue Evanston, Illinois 60201 Phone: (847) 905-7111

Fax: (847) 905-7113

Anthony Luke Simon Registration No. 34,434 Attorney for Appellant

Frank C. Nicholas Registration No. 33,983 Attorney for Applicant MAY-03-06 01:40PM FROM-CLG FAX +18479057113 T-348 P.16/21 F-883

May 3, 2006

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 13 of 18

CLAIMS APPENDIX

A method for responding to digital vehicle requests, the method comprising:
 receiving a voice query by a telematics unit, wherein the telematics
 unit comprises at least one analog digital converter;

converting the voice query to a compressed digital signal;
transmitting the signal to a call center node in communication with an information database via a wireless network;

parsing the signal at the call center node to determine an inquiry; accessing the information database based on the inquiry; formulating at least one response to the inquiry;

transmitting the at least one formulated response in a digital format over the wireless network to the telematics unit; and

translating the at least one formulated response to an analog format at the at least one analog digital converter.

- The method of claim 1 further comprising:
 optimizing the telematics unit for transmission of the voice query to a
 computer call center node.
- The method of claim 2 further comprising:
 filtering the received voice query before converting it to the digital signal.

Case No. GP-304028 (2760/134) Serial No.: 10/675,349 Filed: September 30, 2003

Page 14 of 18

4. The method of claim 1 further comprising:

compressing the voice query digital signal at the telematics unit, wherein a compression algorithm compresses the voice query signal at more than two times the compression ratio of human recognizable audio data compression, and wherein the formulated response is compressed to allow a user of the telematics unit to understand the formulated response.

- 5. The method of claim 1 further comprising:

 transmitting the signal to the call center using a packet data connection.
- 6. The method of claim 1 wherein transmitting the at least one formulated response in a digital format over the wireless network to the telematics unit comprises:

transmitting the at least one formulated response in a digital streaming audio format.

- 7. The method of claim 1 wherein the analog digital converter further comprises a reversible digital analog converter.
- 8. The method of claim 1 wherein transmitting information via the wireless network further comprises transmitting information via an Internet protocol.

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 15 of 18

9. A computer usable medium including a program for responding to digital vehicle requests comprising:

computer readable program code for receiving a voice query by a telematics unit, wherein the telematics unit comprises computer readable program code for at least one analog digital converter;

computer readable program code for converting the voice query to a compressed digital signal;

computer readable program code for transmitting the signal to a call center node in communication with an information database via a wireless network;

computer readable program code for parsing the signal at the call center node to determine an inquiry;

computer readable program code accessing the information database based on the inquiry;

computer readable program code for formulating at least one response to the inquiry;

computer readable program code for transmitting the at least one formulated response in a digital format over the wireless network to the telematics unit; and

computer readable program code for translating the formulated responses to an analog format at the at least one analog digital converter.

10. The computer usable medium of claim 9 further comprising: computer readable program code for optimizing the telematics unit for transmission of the voice query to a computer call center node.

+18479057113

May 3, 2006 Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 16 of 18

- 11. The computer usable medium of claim 9 further comprising:
- computer readable program code for compressing the voice query digital signal at the telematics unit wherein the computer readable program code includes compression algorithm code to compresses the voice query signal at more than two times the compression ratio of human recognizable audio data compression, and wherein the formulated response is compressed to allow a user of the telematics unit to understand the formulated response.
- 12. The computer usable medium of claim 9 wherein computer readable program code for transmitting information via the wireless network further comprises computer readable program code for transmitting information via an Internet protocol.
- 13. A system for responding to digital vehicle requests, the system comprising: means for receiving a voice query by a telematics unit, wherein the telematics unit comprises means for at least one digital converter;

means for converting the voice query to a compressed digital signal;
means for transmitting the signal to a call center node in
communication with an information database via a wireless network;

means for parsing the signal at the call center node to determine an inquiry;

means for accessing the information database based on the inquiry; means for formulating at least one response to the inquiry; means for transmitting the at least one formulated response in a digital

format over the wireless network to the telematics unit; and

means for translating the formulated responses to an analog format at the at least one analog digital converter.

Case No. GP-304028 (2760/134) Serial No.: 10/675,349

Filed: September 30, 2003 Page 17 of 18

14. The system of claim 13 further comprising:

means for optimizing the telematics unit for transmission of the voice query to a computer call center node.

15. The system of claim 14 further comprising:

means for filtering the received voice query before converting it to the digital signal.

16. The system of claim 13 further comprising:

means for compressing the voice query digital signal at the telematics unit wherein the means for compressing compresses the voice query signal at more than two times the compression ratio of human recognizable audio data compression, and wherein the formulated response is compressed to allow a user of the telematics unit to understand the formulated response.

17. The system of claim 13 further comprising:

means for transmitting the signal to the call center using a packet data connection.

- 18. The system of claim 13 further comprising:
- means for transmitting the at least one formulated response in a digital streaming audio format.
- 19. The system of claim 13 wherein the means for the analog digital converter further comprises means for a reversible digital analog converter.
- 20. The system of claim 13 wherein transmitting information via the wireless network further comprises means for transmitting information via an Internet protocol.

Case No. GP-304028 (2760/134)

Serial No.: 10/675,349 Filed: September 30, 2003

Page 18 of 18

Evidence Appendix

None

Related Proceedings Appendix

None.